NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

PAID UP OIL AND GAS LEASE

(No Surface Use)

THIS LEASE AGREEMENT is made effective this <u>lst</u> day of <u>May</u>, 2008, by and between S. N. PALANIAPPA SUBRAMANIAN and spouse, AMIRTHAM SUBRAMANIAN, 1511 Oak Canyon Drive, San Jose, California 95120, as Lessor, and THUNDERBIRD OIL & GAS, L.L.C., 515 Fourth Street, Graham, Texas 76450, as Lessee. All printed portions of this lease were prepared by the party hereinabove named as Lessee, but all other provisions (including the completion of blank spaces) were prepared jointly by Lessor and Lessee.

1. In consideration of a cash bonus in hand paid and the covenants herein contained, Lessor hereby grants, leases and lets exclusively to Lessee the following described land, hereinafter called "leased premises," for the purpose of drilling beneath "using directional or horizontal drilling methods only" without exploring drilling, or operating on the surface of the leased premises. Said leased premises being described as follows:

All of that 0.143 acre lot, tract or parcel of land being Lot 22, Block 13R, Everman Park South Addition, an addition to the City of Fort Worth, out of the Shelby County School Land Survey, Abstract No. 1375, Tarrant County, Texas, according to the Plat recorded in Cabinet A, Slide 9995, Plat Records, Tarrant County, Texas, and being the same tract described in that certain Special Warranty Deed dated November 27, 2006, from Pulte Homes of Texas, L.P. to S.N. Palaniappa Subramanian and spouse, Amirtham Subramanian, filed of record at Document Number D206376207, of the Official Public Records of Tarrant County, Texas;

in Tarrant County, Texas, containing <u>0.143</u> gross acres, more or less (including any interests therein which Lessor may hereafter acquire by reversion, prescription or otherwise), for the purpose of exploring for, developing, producing and marketing oil and gas, along with all hydrocarbon and non hydrocarbon substances produced in association therewith (including geophysical/seismic operations). The term "gas" as used herein includes helium, carbon dioxide and other commercial gases, as well as hydrocarbon gases. In addition to the above-described leased premises, this lease also covers accretions and any small strips or parcels of land now or hereafter owned by Lessor which are contiguous or adjacent to the above-described leased premises, and, in consideration of the aforementioned cash bonus, Lessor agrees to execute at Lessee's request any additional or supplemental instruments for a more complete or accurate description of the land so covered. For the purpose of determining the amount of any shut-in royalties hereunder, the number of gross acres above specified shall be deemed correct, whether actually more or less.

- 2. This lease, which is a "paid-up" lease requiring no rentals, shall be in force for a primary term of three (3) years from the date hereof, and for as long thereafter as oil or gas or other substances covered hereby are produced in paying quantities from the leased premises or from lands pooled therewith or this lease is otherwise maintained in effect pursuant to the provisions hereof.
- 3. Royalties on oil, gas and other substances produced and saved hereunder shall be paid by Lessee to Lessor as follows: (a) For oil and other liquid hydrocarbons separated at Lessee's separator facilities, the royalty shall be twenty percent (20%) of such production, to be delivered at Lessee's option to Lessor at the wellhead or to Lessor's credit at the oil purchaser's transportation facilities, provided that Lessee shall have the continuing right to purchase such production at the wellhead market price then prevailing in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is such a prevailing price) for production of similar grade and gravity; (b) for gas (including casinghead gas) and all other substances covered hereby, the royalty shall be twenty percent (20%) of the proceeds realized by Lessee from the sale thereof, less a proportionate part of ad valorem taxes and production, severance, or other excise taxes and the costs incurred by Lessee in delivering, processing or otherwise marketing such gas or other substances, provided that Lessee shall have the continuing right to purchase such production at the prevailing wellhead market price paid for production of similar quality in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is such a prevailing price) pursuant to comparable purchase contracts entered into on the same or nearest preceding date as the date on which Lessee commences its purchases hereunder; and (c) if at the end of the primary term or any time thereafter one or more wells on the leased premises or lands pooled therewith are capable of producing oil or gas or other substances covered hereby in paying quantities, but such well or wells are either shut-in or production therefrom is not being sold by Lessee, then Lessee shall pay shut-in royalty of one dollar per acre then covered by this lease, such payment to be made to Lessor's credit in the deposit
- 4. All shut-in royalty payments under this lease shall be paid or tendered to Lessor or to Lessor's credit in <u>at Lessor's address above</u> or its successors, which shall be Lessor's depository agent for receiving payments regardless of changes in the ownership of said land. All payments or tenders may be made in currency, or by check or by draft and such payments or tenders to Lessor or to the depository by deposit in the U.S. Mail in a stamped envelope addressed to the depository or to the Lessor at the last address known to Lessee shall constitute proper payment. If the depository should liquidate or be succeeded by another institution, or for any reason fail or refuse to accept payment hereunder, Lessor shall, at Lessee's request, deliver to Lessee a proper recordable instrument naming another institution as depository agent to receive payments.
- 5. If Lessee drills a well which is incapable of producing in paying quantities (hereinafter called "dry hole") on the leased premises or lands pooled therewith, or if all production (whether or not in paying quantities) permanently ceases from any cause, including a revision of unit boundaries pursuant to the provisions of Paragraph 6 or the action of any governmental authority, then in the event this lease is not otherwise being maintained in force it shall nevertheless remain in force if Lessee commences operations for reworking an existing well or for drilling an additional well or for otherwise obtaining or restoring production on the leased premises or lands pooled therewith within 90 days after completion of operations on such dry hole or within 90 days after such cessation of all production. If at the end of the primary term, or at any time thereafter, this lease is not otherwise being maintained in force but Lessee is then engaged in drilling, reworking or any other operations reasonably calculated to obtain or restore production therefrom, this lease shall remain in force so long as any one or more of such operations are prosecuted with no cessation of more than 90 consecutive days, and if any such operations result in the production of oil or gas or other substances covered hereby, as long thereafter as there is production in paying quantities from the leased premises or lands pooled therewith. After completion of a well capable of producing in paying quantities hereunder, Lessee shall drill such additional wells on the leased premises or lands pooled therewith as a reasonably prudent operator would drill under the same or similar circumstances to (a) develop the leased premises as to formations then capable of producing in paying quantities on the leased premises or lands pooled therewith. There shall be no covenant to drill exploratory wells or any additional wells except as expressly provided herein.
- 6. Lessee shall have the right but not the obligation to pool all or any part of the leased premises or interest therein with any other lands or interests, as to any or all depths or zones, and as to any or all substances covered by this lease, either before or after the commencement of production, whenever Lessee deems it necessary or proper to do so in order to prudently develop or operate the leased premises, whether or not similar pooling authority exists with respect to such other lands or interests. The unit formed by such poeling for an oil well which is not a horizontal completion shall not exceed 640 acres plus a maximum acreage tolerance of 10%; provided that a larger unit may be formed for an oil well or gas well or horizontal completion to conform to any well spacing or density pattern that may be prescribed or permitted by any governmental authority having jurisdiction to do so. For the purpose of the foregoing, the terms "oil well" and "gas well" shall have the meanings prescribed by applicable law or the appropriate governmental authority, or, if no definition is so prescribed, "oil well" means a well with an initial gas-oil ratio of less than 100,000 cubic feet per barrel and "gas well" means a well with an initial gas-oil ratio of 100,000 cubic feet or more per barrel, based on 24-hour production test conducted under normal producing conditions using standard lease separator facilities or equivalent testing equipment; and the term "horizontal completion" means an oil well in which the horizontal component of the gross completion interval in facilities or equivalent testing equipment; and the term "horizontal completion" means an oil well in which the horizontal component of the gross completion interval in the reservoir exceeds the vertical component thereof. In exercising its pooling rights hereunder, Lessee shall file of record a written declaration describing the unit and stating the effective date of pooling. Production, drilling or reworking operations anywhere on a unit which includes all

conform to any productive acreage determination made by such governmental authority. In making such a revision, Lessee shall file of record a written declaration describing the revised unit and stating the effective date of revision. To the extent any portion of the leased premises is included in or excluded from the unit by virtue of such revision, the proportion of unit production on which royalties are payable hereunder shall thereafter be adjusted accordingly. In the absence of production in paying quantities from a unit, or upon permanent cessation thereof, Lessee may terminate the unit by filing of record a written declaration describing the unit and stating the date of termination. Pooling hereunder shall not constitute a cross-conveyance of interests.

- 7. If Lessor owns less than the full mineral estate in all or any part of the leased premises, the royalties and shut-in royalties payable hereunder for any well on any part of the leased premises or lands pooled therewith shall be reduced to the proportion that Lessor's interest in such part of the leased premises bears to the full mineral estate in such part of the leased premises.
- 8. The interest of either Lessor or Lessee hereunder may be assigned, devised or otherwise transferred in whole or in part, by area and/or by depth or zone, and the rights and obligations of the parties hereunder shall extend to their respective heirs, devisees, executors, administrators, successors and assigns. No change in Lessor's ownership shall have the effect of reducing the rights or enlarging the obligations of Lessee hereunder, and no change in ownership shall be binding on Lessee until 60 days after Lessee has been furnished the original or certified or duly authenticated copies of the documents establishing such change of ownership to the satisfaction of Lessee or until Lessor has satisfied the notification requirements contained in Lessee's usual form of division order. In the event of the death of any person entitled to shut-in royalties hereunder, Lessee may pay or tender such shut-in royalties to the credit of decedent or decedent's estate in the depository designated above. If at any time two or more persons are entitled to shut-in royalties hereunder, Lessee may pay or tender such shut-in royalties to such persons or to their credit in the depository, either jointly or separately in proportion to the interest which each owns. If Lessee transfers its interest hereunder in whole or in part Lessee shall be relieved of all obligations thereafter arising with respect to the transferred interest, and failure of the transferred interest in all or any portion of the area covered by this lease, the obligation to pay or tender shut-in royalties hereunder shall be divided between Lessee and the transferee in proportion to the net acreage interest in this lease then held by each.
- 9. Lessee may, at any time and from time to time, deliver to Lessor or file of record a written release of this lease as to a full or undivided interest in all or any portion of the area covered by this lease or any depths or zones thereunder, and shall thereupon be relieved of all obligations thereafter arising with respect to the interest so released. If Lessee releases all or an undivided interest in less than all of the area covered hereby, Lessee's obligation to pay or tender shut-in royalties shall be proportionately reduced in accordance with the net acreage interest retained hereunder.
- veloping, producing and herewith, in primary and/or enhanced recovery, Lessee shall have the right of ingress and egress along with the right to conduct such operations on the leased premises as may be reasonably necessary for such purposes, including but not limited to geophysical operations, the drilling of wells, and the construction and use of reads; eanals, pipelines, tanks, water wells, disposal wells, injection wells, pits, electric and telephone lines, power stations, and other similar facilities deemed necessary by discover, produce, store, treat and/or transport production. Lessee may use in such operations, free of cost, any oil, gas, water and/or other substance. produced on the leased premises, except water from Lessor's wells or ponds. In exploring, developing, producing or marketing from the leased premises or lands pooled therewith, the ancillary rights granted herein shall apply (a) to the entire leased premises described in Paragraph 1 above, notwithstanding any partial release or other vartial termination of this lease; and (b) to any other lands in which Lessor now or hereafter has authority to grant such rights in the vicinity of lands pooled therewith. When requested by Lessor in writing, Lessee shall bury its pipelines below ordinary plow depth on cultivated lands. No well shall be located less than 200 feet from any house or barn now on the leased premises or other lands used by Lessee hereunder, without Lesson's consent, and Lessee shall pay for damage caused by its operations to buildings and other improvements now on the leased premises or such other lands, and to commercial timber and growing crops Lessec shall have the right at any time to remove its fixtures, equipment and materials, including well casing, from the leased premises or during the term of this lease or within a reasonable time thereafter.
- 11. Lessee's obligations under this lease, whether express or implied, shall be subject to all applicable laws, rules, regulations and orders of any governmental authority having jurisdiction including restrictions on the drilling and production of wells, and the price of oil, gas, and other substances covered hereby. When drilling, reworking, production or other operations are prevented or delayed by such laws, rules, regulations or orders, or by inability to obtain necessary permits, equipment, services, material, water, electricity, fuel, access or easements, or by fire, flood, adverse weather conditions, war, sabotage, rebellion, insurrection, riot, strike or labor disputes, or by inability to obtain a satisfactory market for production or failure of purchasers or carriers to take or transport such production, or by any other cause not reasonably within Lessee's control, this lease shall not terminate because of such prevention or delay, and at Lessee's option, the period of such prevention or delay shall be added to the term hereof. Lessee shall not be liable for breach of any express or implied covenants of this lease when drilling, production or other operations are so prevented, delayed or interrupted.
- 12. In the event that Lessor, during the primary term of this lease, receives a bona fide offer which Lessor is willing to accept from any party offering to purchase from Lessor a lease covering any or all of the substances covered by this lease and covering all or a portion of the land described herein, with the lease becoming effective upon expiration of this lease, Lessor hereby agrees to notify Lessee in writing of said offer immediately, including in the notice the name and address of the offeror, the price offered and all other pertinent terms and conditions of the offer. Lessee, for a period of fifteen days after receipt of the notice, shall have the prior and preferred right and option to purchase the lease or part thereof or interest therein, covered by the offer at the price and according to the terms and conditions specified in the offer.
- 13. No litigation shall be initiated by Lessor with respect to any breach or default by Lessee hereunder, for a period of at least 90 days after Lessor has given Lessee written notice fully describing the breach or default, and then only if Lessee fails to remedy the breach or default, within such period. In the event the matter is litigated and there is a final judicial determination that a breach or default has occurred, this lease shall not be forfeited or canceled in whole or in part unless Lessee is given a reasonable time after said judicial determination to remedy the breach or default and Lessee fails to do so.
- 14. Lessor hereby warrants and agrees to defend title conveyed to Lessee hereunder, and agrees that Lessee at Lessee's option may pay and discharge any taxes, mortgages or liens existing, levied or assessed on or against the leased premises. If Lessee exercises such option, Lessee shall be subrogated to the rights of the party to whom payment is made, and, in addition to its other rights, may reimburse itself out of any royalties or shut-in royalties otherwise payable to Lessor hereunder. In the event Lessee is made aware of any claim inconsistent with Lessor's title, Lessee may suspend the payment of royalties and shut-in royalties hereunder, without interest, until Lessee has been furnished satisfactory evidence that such claim has been resolved.
 - 15. This lease shall also be subject to the terms and provisions of the attached Exhibit "A" which is incorporated herein by reference.

IN WITNESS WHEREOF, this lease is executed to be effective as of the date first written above, but upon execution shall be binding on the signatory and the signatory's heirs, devisees, executors, administrators, successors and assigns, whether or not this lease has been executed by all parties hereinabove named as Lessor.

Amirtham Subramanian

STATE OF CALIFORNIA

Paid-Up Oil and Gas Lease

ACKNOWLEDGMENT

COUNTY OF SANTA CLARA

This instrument was acknowledged before me on the 24th day of Wlay, 2008, by S. N. PALANIAPPA SUBRAMANIAN

and AMIRTHAM SUBRAMANIAN.

Exhibit "A"

Attached to and made a part of that Certain Oil and Gas Lease dated May 1, 2008, by and between S. N. PALANIAPPA SUBRAMANIAN and AMIRTHAM SUBRAMANIAN, as Lessor, and THUNDERBIRD OIL & GAS, L.L.C., as Lessee, covering 0.143 acres, more or less, situated in the Shelby County School Land Survey, Abstract No. 1375, in Tarrant County, Texas;

In the event of conflict with the provisions of the standard form, then it is expressly understood, agreed and provided by and between Lessor and Lessee that the following terms, covenants, conditions, provisions, and limitations shall prevail and control over any other provisions in the Lease to the contrary, to wit:

- Lessee is hereby given the option to extend the primary term of this lease for an additional two (2) years from the expiration of the original primary term. This option may be exercised by Lessee or Lessee's assigns at any time during the last year of the original primary term by paying to Lessor herein, or his heirs, successors or assigns, an additional bonus equal to the bonus dollars originally paid for this lease. Lessee or Lessee's assigns shall exercise such option by placing written notice of such action in the U.S. Mail, postage prepaid, to Lessor at the above address, or by delivery of such notice to Lessor, in either case, prior to the end of the primary term hereof.
- It is agreed between the Lessor and Lessee that, notwithstanding any language herein to the contrary, all oil, gas or other proceeds accruing to the Lessor under this lease or by state law shall be without deduction, directly or indirectly, for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting, and marketing the oil, gas and other products produced hereunder to transform the product into marketable form; however, any such costs which result in enhancing the value of the marketable oil, gas or other products to receive a better price may be deducted from Lessor's share of production so long as they are based on Lessee's actual cost of such enhancements. Notwithstanding anything herein to the contrary, Lessor's royalty shall be paid monies calculated on the amount received by Lessee from a non-affiliated third party purchaser.
- 3. Notwithstanding anything herein to the contrary, should Lessee exercise its option under paragraph 6 of the oil and gas lease to unitize or pool this acreage for the production or oil, gas, or related substances, the entire tract must be included in the unit.
- By the acceptance hereof, Lessee agrees that no drilling, prospecting, or mining operations will be conducted, nor any pipelines or any structures or any type facilities will be constructed upon the surface of the herein leased premises without the consent of Lessor herein; but Lessee shall have the right to prospect, drill, mine, and produce said minerals for said land by operations which it may conduct on adjoining or nearby lands through the drilling, operating, and maintaining of directional and/or horizontal wells on such adjoining or nearby lands, or by operations which it may conduct upon lands with which the herein premises may be pooled.
- Lessor does hereby grant, transfer and convey unto Lessee a right-of-way and easement to drill and operate under the surface of and through the lands described herein or any other land adjacent thereto, regardless of any depth limitations set out therein, one or more directional wells to be bottomed on lands other than the lands described herein, for the purpose of exploring, drilling mining and operating for, developing and producing oil, gas and associated hydrocarbons under the terms of any oil and gas leases(s) now owned or hereafter acquired by Lessee, covering lands other than the lands described herein and to take any and or all other actions necessary or desirable in the rights granted herein. This right-of-way and easement shall remain in full force and effect for the primary term of the hereof and as long thereafter as used by Lessee for the purposes therein granted.
- Notwithstanding anything herein to the contrary herein contained, the payment of shut-in royalty as provided in paragraph 3 of the oil and gas lease, shall not maintain this lease in force by such payment alone for more than two (2) consecutive years beyond the primary term or any extension thereof. Further notwithstanding the provisions contained in paragraph 4 of the oil and gas lease, the annual shut-in payment amount shall be ten dollars per net mineral acre.
- s own expense, will provide and maintain in force while any well is being drilled on the leased premises liability insurance in the amount of at least \$1,000,000.00 covering Lessor as well as Lessee, for any liability for property damage or personal injury arising as a result of Lessee's conducting operations. This insurance is to be carried by one or more insurance companies authorized to transact business in Texas. Lessee will furnish Lessor with certificates of all insurance required by this Lease.
- LESSEE AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS LESSOR, AND LESSOR'S PARTNERS, REPRESENTATIVES, SUCCESSORS AND ASSIGNS, AND THEIR OFFICERS, REPRESENTATIVES, EMPLOYEES, AND AGENTS, AGAINST ALL COSTS, EXPENSES, CLAIMS, DEMANDS, LIABILITIES, AND CAUSES OF ACTION OF ANY NATURE OR KIND, INCLUDING BUT NOT LIMITED TO CLAIMS FOR INJURY TO OR DEATH OF PERSONS AND LOSS OR DAMAGE TO PROPERTY, AND INCLUDING, WITHOUT LIMITATION, ATTORNEY FEES, EXPERT FEES, AND ALL COURT COSTS AND OTHER EXPENSES INCURRED, ARISING OUT OF, RESULTING FROM, OR IN ANY WAY CONNECTED WITH, LESSEE'S OPERATIONS AND ACTIVITIES ON THE LAND OR ANY ADJACENT OR POOLED LAND OR LESSEE'S MARKETING OF PRODUCTION FROM THE LAND OR ANY POOLED LAND OR ANY VIOLATION OF ANY ENVIRONMENTAL REQUIREMENTS IMPOSED ON LESSEE. AS USED IN THIS PARAGRAPH, THE TERM "LESSEE" INCLUDES LESSEE, ITS AGENTS, EMPLOYEES, SERVANTS, INDEPENDENT CONTRACTORS, AND ANY OTHER PERSON ACTING ON ITS BEHALF OR UNDER ITS DIRECTION AND CONTROL, WHETHER ACTING WITHIN THE SCOPE OF THEIR EMPLOYMENT OR NOT, AND WHETHER NEGLIGENT OR NOT.
- Lessee must comply with all valid laws, ordinances and regulations, whether state, federal or municipal, applicable to the premises. The use which lessee makes and intends to make of the premises will not result in the disposal or release of any hazardous substance or solid waste on or to the premises. In the event that any hazardous substances, solid wastes or other pollutants are disposed or released on and/or under the premises resulting in the contamination or pollution to the premises or any adjoining property, arising out of said contamination or pollution, caused by or consented to by the lessee, then lessee shall indemnify and hold harmless the lessor and lessor's heirs, executors, administrators, successors, and assigns, from and against any and all liability from the rules and regulations of the Texas Railroad Commission, the comprehensive environmental response, compensation, and liability act of 1980, the resource conservation and recovery act of 1976, or any other state or federal statute, rule or regulation now in existence or hereinafter enacted relating to such substances or waste and lessee has the absolute responsibility for all cleanup of said pollution or contamination or reclamation of the premises and all costs and expenses thereof. Lessee shall conduct all activities so as not to pollute or contaminate all fresh water sources including adjacent or nearby lakes and streams.
- 10. In the event that the leased premises are subject to covenants, deed restrictions, drilling ordinances, permit requirements from any authority, or any other impediment that would not permit directional or horizontal drilling methods from a location outside the subdivision or addition identified in the leased premises or on additional tracts with which the Leased premises are pooled, then Lessor hereby consents to and irrevocably designates Lessee as Lessor's agent to acquire permits and/or take steps to amend, modify or change any covenants, deed restrictions, or remove any other impediment using lawful means so as to allow directional or horizontal drilling methods from locations outside the subdivision or addition described in the leased premises. Lessor further agrees to allow a high impact drilling permit in the event that one is required to develop the mineral rights, and authorizes Lessee to represent to any authority that such consent has been granted. Lessee shall be responsible for all cost and expense securing any such change and shall hold harmless and indemnify Lessor from any claims and expense incurred in securing any amendment, change, modification or permit.
- 11. The leased premises includes all of Lessor's interest in and to the adjacent roads, streets, alleys, any easements, rights of way, tracts held in common and any other adjacent or nearby tracts of land in which Lessor holds an interest in the oil and gas and other minerals.

SIGNED FOR IDENTIFICATION:

End of Exhibit "A"

After recording return to: Thunderbird Oil & Gas, LLC 515 Fourth Street Graham, Texas 76450



THUNDERBIRD OIL & GAS 515 FOURTH ST

GRAHAM

TX 76450

Submitter: THUNDERBIRD OIL & GAS

SUZANNE HENDERSON TARRANT COUNTY CLERK TARRANT COUNTY COURTHOUSE 100 WEST WEATHERFORD FORT WORTH, TX 76196-0401

<u>DO NOT DESTROY</u> <u>WARNING - THIS IS PART OF THE OFFICIAL RECORD.</u>

\$24.00

Filed For Registration: 06/18/2008 03:14 PM
Instrument #: D208234959
LSE 4 PGS

By:

D208234959

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